## Brigham and Women's Hospital: Partners–Southwestern Clinical Epidemiology and Validation Center

Clinical Epidemiology and Validation Center

## **Objectives**

To streamline the most promising biomarkers for ovarian (and other female) cancers into clinical practice by assembling and disbursing clinical resources appropriate for validation.

## **Program Description**

The Boston Clinical Epidemiology and Validation Center (CEVC) seeks continued participation in the EDRN now as the Partners–Southwestern Clinical Epidemiology and Validation Center. The mission of our joint center is to:

- Conduct biomarker validation for ovarian (and other female) cancers by developing collaborative projects using our collective expertise in epidemiology, clinical oncology, biostatistics, and clinical biochemistry.
- Develop and characterize auto—antibodies to cancer antigens whose development may offer a uniquely broad approach to disease control. Histologic subtypes of cancer may require multiple markers for detection; and a multiple marker panel would also increase the efficiency of screening for multiple cancers simultaneously.
- Develop statistical techniques to combine information from multiple assays for efficient testing of multiple analytes.
- Continue to refine and validate new assays for biomarkers in collaboration with EDRN investigators
  and industrial partners to create assays that meet clinical laboratory standards and are ready for further
  validation in the broader EDRN network.
- Develop a "standard ovarian cancer reference set" composed of multiple identical sets of aliquots to facilitate preclinical and clinical validation of ovarian cancer biomarkers. These sets could fill a critical need for "filtering" the large number of biomarkers being proposed for detection of ovarian cancers in a manner that they all can be compared based on their performances. Promising biomarkers would be further evaluated using other cross–sectional and longitudinally collected specimens.